The precipitate is to be digested with alcohol, which leaves certain impurities, and then pulverized carbonate of potash or soda is to be added to the solution, until it is neutral; the clear liquor is to be decanted and evaporated. It is desirable to have a small excess of acid present, for which purpose put a little of the alcoholic liquor on one side, to be added at last to the neutral portion, and then leave the whole at rest, that the sulphate of potash may separate before the evaporation is effected.

"The saccharine principle is a transparent yellow mass, breaking like amber. Being heated it melts, and burns with a bright flame and much smoke. In powder it burns like resin or lycopodium. It does not change in the air. Its aqueous solution is precipitated by *all the acids*, and the more completely the stronger is the solution. The precipitates have no acid taste, but are sweet; they dissolve in water, and gelatinize upon cooling, if the solutions are strong.

"This substance also combines readily with bases forming soluble neutral solutions; those with baryta and lime are not precipitated by carbonic acid. This principle forms insoluble compounds with metallic acids and many metallic oxides. It combines also with many salts, causing their precipitation in some cases.

"The saccharine principle of the root of the wild liquorice, (*Polypodium vulgare,*) is altogether different in its qualities from the above substance."—*Journal of Science.*

95. *Iodine Detected in the Blood.*—M. Bennerscheidt has detected iodine in the crassamentum of the blood of a person who had employed for a long time frictions with iodine ointment. He could not find any indication of its presence in the serum.

96. *Benzoic Acid in the Grasses.*—"Benzoic acid has been found by M. Vogel in the sweet-scented vernal grass, (*Antoxanthum odoratum,*) and in the sweet-scented soft grass, (*Holcus odoratus.*) It is these two grasses which communicate to hay the aroma peculiar to themselves."—*Lond. Med. and Surg. Journ. Nov.* 1829.

97. *New Alcali in the Eupatorium Cannabium.*—M. Righini has discovered a new alcali in the *Eupatorium cannabium*, to which he has given the name of Eupatorine, and which he considers as the active principle of this plant. This substance is obtained in the form of a white powder; has a taste sui generis; is insoluble in water; soluble in sulphuric ether and diluted alcohol. It swells in the fire and burns. It combines with sulphuric acid, and crystallizes in needles. M. R. has obtained Eupatorine in too small quantities to try its medical properties.—*Repertorio di Medic. Torino, August*, 1828.

MISCELLANEOUS.

98. *Medical Statistics of the Netherlands.*—From the researches of the Royal Commission of Statistics of the Netherlands, it appears that the excess of male children over those of the female sex is 1 to 0.9427; thus in the course of ten years there were 30,485 boys born above the number of girls; but the mortality among the males is greater than among the females, and in ten years this excess was 25,400; so that at the end of ten years the excess of the males was only 5,085. The deaths throughout the kingdom are 1 in every 39 86-100 persons, and the births 1 for every 28 16-100 persons. One of the most curious and interesting approximations of two natural phenomena, however, connected with population, is that stated in M. Quentelet's "Researches on the Population, Number of Births, Prisons and Poor-houses, in the Kingdom of the Netherlands." It appears from a series of observations, made for the space of eighteen

years, and which he adduces, that the number of deaths, as well as that of births, have been in an inverse ratio to the thermometrical variations of the atmosphere. Thus the march of the thermometer, ascending from January to July at Brussels, and uniformly descending from that month till December, is observed to be accompanied by a progressive line, denoting the intensity of births in an inverse order to the above; beginning from February, which is the highest, and ending in July, when the number of births is the least. It then ascends till December, following an opposite course to the thermometrical line.

99. *Medical Profession in St. Petersburgh.*—Dr. Granville informs us in his *Journal of Travels to and from St. Petersburgh* that the police of the medical profession is placed upon a very judicious footing in St. Petersburgh. No medical man, let his rank be what it may, can settle and practice in that city without having undergone a proper examination, and a list of all persons authorized to practice is printed yearly. A *pharmacien*, or "Aptékare," dares not make up a prescription of any practitioner, whose name does not appear in the printed list, and still less can he venture to sell a drug, in however small a quantity, or however insignificant its nature, without a prescription regularly signed. Every prescription must be signed with the name of the physician whose advice has been taken, and must also mention the patient for whom it is written, with the day of the month and year. To the medicine a label is affixed, mentioning the date and hour of delivery, its price and the name of the "Aptékare," and his shop; and even the most simple medicine must be sealed. The laws against professed quacks are generally put in force with great strictness. The surveillance of the medical profession, and of its rights and privileges, is confided in a particular manner to the minister of the home department, who is assisted by a council of medical men, one of the attributes of which council is to inquire into the rights to practice claimed by individuals, and to report to the minister any infraction of the established law respecting the regulation of the practice of medicine, as well as the existence of any empirical impostor. By an ukase of the late Emperor, who wished to encourage the higher branches of education in medicine, persons who have obtained the degree of M. D. are at once admitted into one of the thirteen classes of nobility.

100. *Duration of Human Life in Russia.*—Cases of longevity are not only much more common, but also more extraordinary in respect to a greater duration, in Russia than in any other part of Europe; thus, from the report of the holy synod, published in 1827, it appears that there were living in 1825, among those who professed the Greco-Russian religion throughout the empire, not fewer than 848 males who were 100 and more years old; among whom, 32 had passed the age of 120, 4 were between 125 and 130, and 4 others between 130 and 135 years of age. Out of 606,881 males who died in 1826, 2785 had passed the age of 90 years; 1432 that of 95; and 818 that of 100. Among the latter, 38 were more than 115 years of age; 24 more than 120; 7 more than 125; and one was 160 years old at his death.—*Lond. Med. Gaz. Dec.* 1828.

101. *Maison des Enfans trouvés at St. Petersburgh.*—Dr. Granville states, on the authority of Dr. Kühlwür, the superintending physician, that the mortality in this institution, among the children, within the first six weeks, is from thirty to forty per cent.—*Granville's Travels to and from St. Petersburgh.*

102. *Infirmary for Diseases of the Eyes at St. Petersburgh.*—This institution was established in May, 1824, and was supported from its very onset by the whole of the imperial family. The progressive increase of its operations and income, during the short time that has elapsed since its origin, is quite extraordinary in the annals of medical charities. In the second year of its existence the received income amounted to 48,734 roubles, and the number of patients treated was 11,783, of whom 3853 were new, and 273 were admitted as in patients; the

number of important operations performed was 464. During the third year the total income was 169,422 roubles, and the number of patients treated 15,079, 4794 of whom were new, 340 were lodged and boarded in the Infirmary, and 445 important operations were performed.—*Ibid.*

103. *Bristol Infirmary for Diseases of the Eye.*—This institution, we believe, was established by Mr. Estlin, the very intelligent surgeon of Bristol; and we notice it on the present occasion to call the attention of our readers to the prodigious benefits which may be conferred on the public, at very moderate expense, by judicious management. An average number of 680 patients have been admitted annually; the whole expense not exceeding 40*l.* per annum. That the medicines for such a number, many of whom it appears were in attendance for several months, should not have amounted to a larger sum, appears extraordinary; but when we learn that besides this, the house-rent, and other incidental expenses are included, and even that some patients from a distance have been maintained while under operations, it affords the most striking illustration we have met with of a maximum of benefit and a minimum of expenditure.—*London Medical Gazette, December*, 1828.

104. *Mode of Preserving Specimens of Morbid Anatomy.* By JOHN S. GASKOIN.—Mr. Gaskoin recommends the following means for preserving the appearances of diseased parts:—"Having removed the diseased part from the body, it should be as little handled or dissected as possible, especially when the effects of inflammation, congestion, &c. are to be preserved, as the blood may be pressed from, or disturbed in, the minute vessels. Let the blood which may have escaped from cut vessels, be gently washed off from the surface by a solution of the *muriate of ammonia*, or be absorbed by a soft sponge, lightly applied. The part should then be wrapped with care in old linen, and be so immersed in *one part of a saturated solution of the muriate of ammonia*, (sal ammonia of commerce,) *and two of rectified spirit of wine.* After two or three days the linen may be removed, and the part restored to the fluid.

"Should the preparation be large, or, from the nature of the disease, contain a large quantity of aqueous fluid, then an additional portion of the muriate of ammonia in powder should be added, to meet the excess of aqueous menstruum.

"The time necessary for maceration will mainly depend upon the size of the part to be preserved; but, generally, from ten to fifteen days will be found to be sufficient, although nothing can be lost by an extension of that time. Being taken from the macerating fluid, it should be again washed in a solution of the muriate of ammonia, then dissected as much as requisite, and be 'put up' at once, *in equal quantities of a saturated solution of the above salt in distilled water and rectified spirit of wine.* I should observe that, in these proportions, the part is somewhat corrugated, which is not the case if *one-third* of the saline solution be used with two of the spirit; yet, in the former quantities, I have some reason to think the appearances of disease may be more securely preserved."

This solution, he says, seems to have the property of fixing the blood in the extreme ramifications, without constringing the vessels themselves; while rectified spirit corrugating the delicate membranes of the minutest vessels, repels their contents into the larger, the thicker coats of which are easily acted on, and thus reduces the appearances of inflammation, &c.—*Ibid.*

105. *Supposed Change of Climate.*—"Professor SCHOUW, of Copenhagen, has argued plausibly against the opinion that certain climates have changed in the lapse of ages. The date tree, for instance, he says, requires a mean temperature of 78° Fahr. to bring its fruit to perfection; and it is as successfully cultivated in Palestine now as it was in the earliest times, of which he gives interesting notices. Jerico was called Palm town; and Deborah's palm tree was mentioned between Rama and Bethel. Pliny mentions the palm tree as being fre-

quent in Judea, and chiefly about Jerico. Tacitus, Josephus, Strabo, Diodoras Siculus, and Theophrastus, all speak of woods of palm trees there; and on the Hebrew coins date trees are by no means rare, and are easily recognised by their fruit."—*Magazine of Natural History, January*, 1829, *from Oken's Isis.*

106. *Epidemic at Paris.*—An extraordinary epidemic made its appearance in Paris about the commencement of June, 1828, in several parts of the city simultaneously, the nature and causes of which excited great attention among the medical men of that place. The principal symptoms were a diminution of sensibility and mobility in the extremities, accompanied with an itching or pricking sensation in these parts, sometimes attended with swelling and redness, and generally preceded by nausea, vomiting, and diarrhœa. The pain of the extremities was in many cases excessive, causing a total deprivation of sleep. The disease usually commenced with some derangement of the digestive organs, as anorexia, nausea, vomiting, and diarrhœa; in some patients these symptoms were so violent, that they supposed that they were poisoned; in general, however, they were slight. After these gastric symptoms have continued some time, (from a few days to two weeks,) they slowly disappear, and are succeeded by a series of other phenomena. The face becomes red, swelled, and painful, and is the seat of an uncomfortable pricking sensation. This is not as common as affections of the extremities. These parts are almost always red and swelled, and the patients experience various sensations in them, as prickings as if with needles, itching, lancinating pains, especially in the feet and hands. These symptoms are most violent in the lower extremities. The swelling was not constant; when it did exist it was sometimes accompanied with redness, resembling that of erythema or erysipelas; at other times there was no redness, in which case the swelling was like that of œdema. With these symptoms there was a marked diminution of sensibility, the patients lost in a great measure their perception of objects by the touch. The progress of this disease was extremely slow, and its duration of course very long; some patients were under treatment four and five months. In most cases the symptoms gradually declined in severity, motion and sensibility returned, the erythematous redness and swelling disappeared, the epidermis became detached in large plates or scales, but the patients still experienced a feeling of heaviness and stiffness in their limbs. Dissection revealed no morbid changes to which these symptoms could be attributed. The causes of this epidemic are yet unknown, though a variety of theories have been framed respecting it. It generally occurred in the lower classes of persons who are badly nourished, and live in low and damp habitations. Some physicians, as Ratier and Cayol, thought it was analogous to the disease produced by the ergot, others to the colica pictonum. M. Broussais says it is a common disease, being an erysipelas combined with gastro-enteritis. Alibert says that it is erysipelas, and some again that it is a modification of pellagra. The treatment of course was various and vacillating; the most successful, however, is said to have been that used in the Charité for colica pictonum, viz. sulphurous baths and douches.—*Revue Médicale. Dec.* 1828, *and Bulletin des Sciences Médicales, Nov.* 1828.